

ITEM: 9

SUBJECT: Bear Valley Water District, Alpine County

BOARD ACTION: *Consideration of new NPDES Permit and Time Schedule Order*

BACKGROUND: The Bear Valley Water District owns and operates a wastewater collection, treatment and disposal system that provides sewerage services to the community of Bear Valley, Bear Valley Ski Resort, and the Lake Alpine/United States Forest Service. The design treatment capacity of the facility is 0.5 million gallons per day. The secondary treated and chlorinated effluent is pumped to a 325 acre-foot unlined storage reservoir for final disposal by spray irrigation during summer months. The effluent storage and land disposal facilities are inadequate to prevent discharges of treated wastewater from overflowing the reservoir during very wet precipitation years. No additional land is available for expansion of the storage reservoir or land disposal facilities. As a result, the District has applied for a NPDES permit for seasonal discharge of treated effluent to Bloods Creek in order to avoid future unauthorized discharges to surface waters. This Order permits effluent discharge to occur during snow melting season (1 January through 30 June) when substantial flows are in the receiving water, only during in extremely wet winter periods, and only when the effluent can receive at least 20:1 dilution from the receiving water. This Order also requires the Discharger implement their 2002 *Land Disposal Maximization Plan* for summer disposal of wastewater prior to discharge to surface waters.

ISSUES: *The Discharger's issues of concern include:*

The Discharger submitted a *Land Disposal Maximization Plan* indicating that enhanced evaporation could be employed in emergency situations to avoid surface water discharges and could be installed relatively rapidly. The Discharger would like to delete this portion of their plan regarding enhanced evaporation by stating that increasing evaporation would be contrary to BPTC because it concentrates salinity constituents in the wastewater. Although it is true that enhanced evaporation would increase the concentration of salinity constituents to some degree, it would not increase the overall salt load of the wastewater applied to land. Staff does not believe the minor increase in salt concentrations is contrary to BPTC. The Discharger also stated that implementation of this alternative would be cost prohibitive as a means of normal effluent disposal and therefore should not be considered except in emergency situations. The Discharger has not provided documentation that enhanced evaporation is cost prohibitive. Furthermore, enhanced evaporation would not have to be routinely implemented on a permanent basis. A reasonable approach would be to implement it only during those years when there has been excessive precipitation and there is a threat of discharge from the storage reservoir in a subsequent winter. The District implemented this alternative successfully in 2001 when faced with a significant amount of carry-over water from the previous year.

*Stockton East Water District's (SEWD) issues of concern:*

SEWD requests that a NPDES permit for the Discharger not be adopted. SEWD strongly believes that the Discharger, by implementing their 2002 *Land Maximization Plan*, will have enough land disposal capacity for several back to back 100-yr storm events and still accommodate the current growth rate to the year 2015. If the Regional Board insists on issuing the permit, SEWD requests that tertiary treatment be required as a condition of any discharge to surface water.

As demonstrated this past winter, during very high precipitation years, the storage reservoir does not have sufficient capacity to prevent discharge to surface water and a permit is needed for those wet years. The proposed Order requires the Discharger implement the 2002 *Land Maximization Plan*, yet even with full implementation, as the District continues to grow the threat of discharge to surface waters will increase. The Department of Health Services (DHS) has recommended on past NPDES permits that treated domestic wastewaters discharged to surface waters should be treated to tertiary levels to protect public health where a minimum of 20 to 1 dilution is not available. The proposed Order requires a minimum dilution of 20 to 1, stream volume to effluent volume, be demonstrated prior to discharge.

*Department of Health Services' issues of concern:*

The Department objects to granting an NPDES permit to the Bear Valley Water District. The Department states that there are land disposal alternatives that should be utilized prior to the establishment of an NPDES permit that allows discharge of the wastewater to the pristine headwaters of the Stanislaus River system. It also suggests that the Bear Valley consider upgrading its current treatment to a tertiary level to facilitate the use of their wastewater effluent in a recycling program and not discharge into a drinking water source. Staff has worked with the Discharger to explore alternative land disposal options and has concluded no feasible options exist other than wintertime surface water disposal. The proposed Order requires a minimum dilution of 20:1 for discharge. This is consistent with DHS recommendations on other NPDES permits.

Mgmt. Review \_\_\_\_\_  
Legal Review \_\_\_\_\_

20/21 October 2005 Region 5 Board Meeting  
CVRWQCB  
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